

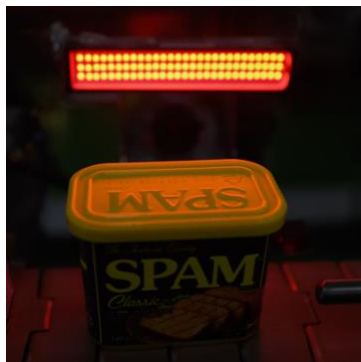
Science V11/S3: How Spam is Made

Chances are you have heard of SPAM. SPAM is a popular pork product sold all around the world. People love SPAM because of its taste, cost, and shelf stability (ability to remain edible). It gained popularity during the Great Depression (a time of financial difficulty) when families did not have a lot of money for food. It gained worldwide popularity during World War II when its shelf-stable properties helped feed troops around the world. There has been a lot of mystery surrounding the process of making SPAM. Little is generally known about the meat product or its ingredients. As it turns out, this mystery meat is no mystery at all.



There are only six ingredients in SPAM: pork/ham, salt, water, potato starch, sugar, and sodium nitrite. Most of these ingredients can be found in our kitchens, but others not so much. Sodium nitrite prevents the growth of bacteria that can cause food poisoning (an illness that can lead to vomiting and diarrhea). Potato starch is added to prevent moisture from leaving the meat when it is being cooked. Without potato starch, cooked SPAM would become dry. Potato starch also binds the meat together so it keeps its shape.

The process starts with the meat being removed from the bone (a process done by hand) and then ground. Metal detectors are used to make sure there aren't any inedible (not



able to be eaten) objects in the meat. The ingredients are mixed into the meat until it is ready to be vacuum-sealed (made to be airtight) into cans. Perhaps the most surprising part of the SPAM process is that the meat is cooked inside of the cans after they have been packaged. This is what makes the SPAM shelf stable. After this, the product is boxed and shipped to grocery stores around the world.